

WHAT IS CLAIMED IS:

1. A surgical instrument for fragmenting and extracting stones comprising, in combination:
 - an outer sheath having a proximal end and a distal end;
 - wherein the outer sheath has a basket sized for entrapping the stones and located near the distal end of the outer sheath;
 - an inner core longitudinally extending through the core and longitudinally movable relative to the core; and
 - wherein the distal end of the inner core is adapted to engage and fragment the stones.
2. The surgical instrument according to claim 1, wherein longitudinal movement of the inner core relative to the outer sheath transforms the basket from an expanded condition to a collapsed condition, the basket having a profile small in the collapsed condition than the expanded condition.
3. The surgical instrument according to claim 2, wherein the basket is preformed in the expanded condition and resiliently returns to the expanded condition from the collapsed condition upon removal of force applied by the inner core.
4. The surgical instrument according to claim 2, wherein an abutment of the inner core engages an abutment of the outer sheath to resiliently deform the basket from the expanded condition to the collapsed condition upon longitudinal movement of the inner core relative to the outer sheath in a direction toward the distal end of the outer sheath.
5. The surgical instrument according to claim 1, wherein the distal end of the outer sheath is provided with an opening so that the inner core can extend through the opening and past the distal end of the outer core.

6. The surgical instrument according to claim 1, wherein the distal end of the inner core is moveable from a retracted position within the basket to an extended position past the distal end of the outer sheath.

7. The surgical instrument according to claim 1, wherein the distal end of the inner core is provided with a blunt nose for fragmenting the stones.

8. The surgical instrument according to claim 1, wherein an energy source is connected to the inner core to provide energy for fragmenting the stones.

9. The surgical instrument according to claim 8, wherein the energy source is a vibrating device.

10. The surgical instrument according to claim 8, wherein the energy source is a drilling device.

11. The surgical instrument according to claim 8, wherein the energy source is laser device.

12. A surgical instrument for fragmenting and extracting stones comprising, in combination:

an outer sheath having a proximal end and a distal end;

wherein the outer sheath has a basket sized for entrapping the stones and located near the distal end of the outer sheath;

an inner core longitudinally extending through the core and longitudinally movable relative to the core; and

wherein the distal end of the inner core is longitudinally moveable from a retracted position within the basket to an extended position past the distal end of the outer sheath.

13. The surgical instrument according to claim 12, wherein longitudinal movement of the inner core relative to the outer sheath transforms the basket from an expanded condition to a collapsed condition, the basket having a profile small in the collapsed condition than the expanded condition.

14. The surgical instrument according to claim 13, wherein the basket is preformed in the expanded condition and resiliently returns to the expanded condition from the collapsed condition upon removal of force applied by the inner core.

15. The surgical instrument according to claim 13, wherein an abutment of the inner core engages an abutment of the outer sheath to resiliently deform the basket from the expanded condition to the collapsed condition upon longitudinal movement of the inner core relative to the outer sheath in a direction toward the distal end of the outer sheath.

16. The surgical instrument according to claim 12, wherein the distal end of the outer sheath is provided with an opening so that the inner core can extend through the opening and past the distal end of the outer core.

17. The surgical instrument according to claim 12, wherein the distal end of the inner core is adapted to engage and fragment the stones.

18. The surgical instrument according to claim 12, wherein the distal end of the inner core is provided with a blunt nose for fragmenting the stones.

19. The surgical instrument according to claim 12, wherein an energy source is connected to the inner core to provide energy for fragmenting the stones.

20 A surgical instrument for fragmenting and extracting stones comprising, in combination:

an outer sheath having a proximal end and a distal end;
wherein the outer sheath has a basket sized for entrapping the stones and located near the distal end of the outer sheath;
an inner core longitudinally extending through the core and longitudinally movable relative to the core;
wherein the distal end of the inner core is longitudinally moveable from a retracted position within the basket to an extended position past the distal end of the outer sheath;
wherein the distal end of the inner core is adapted to engage and fragment the stones;
and
wherein longitudinal movement of the inner core relative to the outer sheath transforms the basket from an expanded condition to a collapsed condition, the basket having a profile small in the collapsed condition than the expanded condition.